mesoscutum strongly transverse, more than twice as broad as long, with distinct parapsidal grooves, sculptured like pronotum; disk of scutellum flat, a little broader than long, with a small elongate puncture on each side at base, its surface weakly reticulate like mesoscutum; propodeum narrowing gradually posteriorly, carinately margined at sides, dorsal face much longer than posterior face and not separated from it by a carina; down the middle and on posterior face the propodeum is nearly smooth, laterad on the dorsal face it is delicately wrinkled; all femora considerably swollen, the anterior pair the largest, the middle pair the smallest; stigma small, subquadrate, not longer than parastigma; radius long, bent sharply forward at apex, the short apical section forming virtually a right angle with the long basal abscissa and usually nearly attaining anterior margin of wing; first discoidal cell complete, short-petiolate; posterior wings without distinct venation. Abdomen as long as thorax and slightly broader although strongly narrowed toward base and apex, entirely smooth and shining.

Black; the antennae yellowish brown toward base, brownish black apically; legs black or brownish black; anterior tibiae and all tarsi brownish yellow; wings rather strongly infumated, the stigma and parastigma dark brown, the veins paler.

Male.—Like the female in all important respects, but the abdomen is rather broadly rounded at apex, and the antennae and legs are paler, the anterior coxae entirely, the anterior femora except along the dorsal edge, and the middle coxae below, usually brownish yellow.

Type locality.—Eastwood, New South Wales, Australia.
Type.—U. S. N. M. No. 44854.
Host.—*Grapholitha molesta* Busck.

Described from 16 females and 8 males reared by R. W. Burrell, of the Bureau of Entomology, in 1931. The National Collection contains, in addition, a considerable number of insectary-bred specimens from Sydney, New South Wales, *G. molesta* likewise being the host of this material.

This species was first identified as an undescribed species of *Perisierola* by Mr. A. B. Gahan. He has suggested that I describe it in this paper along with the other new foreign parasites of the Oriental fruit moth for which names are desired.

NEW SPECIES OF HELMIDAE (COLEOPTERA).

By Paul N. Musgrave, *Fairmont, West Virginia.*

Helmis dietrichi, n. sp.

Male.—(Figure 2, A)—*General*—Body elongate, convex, piceous black with four oblique luteus bands on elytra located as in figure, moderately shining; ventral side, base of antennae, palpi, front margin of pronotum and legs, rufous. Length 2.5 mm. Greatest width, across elytra, slightly less than 1 mm. *Head* globose, inserted in the prothorax to the eyes, surface granular, sparsely covered

with recumbent pubescence. Eyes not prominent, whitish. Antennae filiform, 11-jointed, 1 and 2 enlarged, 3–8 approximately equal, 9 and 10 larger than 7 and 8, 11 slightly thicker than 1 and 2, about as long as 9 and 10 together, pointed and hairy at apex, reaching to about $^3/_4$ length of pronotum. *Pronotum* approximately as wide as long (.6 mm), convex, sides almost parallel in basal third and then gradually convergent, widest about $^1/_3$ from base, basal margin sinuate, apical margin moderately extended forming a hood over head, disc uniformly punctulate, punctures separated by about or more than their own diameter, clothed with sparse gray pubescence; no elevated lines as in *Limnius*. *Legs* long and strong; front coxa transverse, femora piceous at apex, tarsi curved, with large claws. *Elytra* at base slightly wider than thorax, sides gradually divergent for first fourth, then almost parallel to apical third, then convergent, tips truncate, convex, impressed stria of punctures about same size of those of thorax, intervals with grayish pubescence arising from minute punctures. Under side of abdomen covered with the usual short, silky, decumbent pubescence, heavier on sides. Longer, stronger hairs scattered over entire under surface. *Genitalia.* (Aa–Ab)—Median lobe slender, strongly decurved.

Female.—Slightly larger (length 2.6 mm., width 1.1 mm.), otherwise externally similar to male.

Variations.—Marked variation in size of bands of elytra. One paratype shows apices of basal bands joining apical bands. Wings vary through series of paratypes from vestigial to normal Helmid form.

Type locality.—Dog River near Lucedale, Mississippi.

Types.—Holotype (male), allotype (female) and four paratypes in the U. S. National Museum. Several additional paratypes in collection of author and that of Henry Dietrich, for whom the species is named. Paratypes were collected by author (and Mr. Dietrich) from several localities in southern Mississippi; near DeFuniak Springs, Florida, and Wrens, Georgia, from June 22 to July 7, 1931. Specimens were almost always found clinging to submerged roots. May be separated from other Eastern species of *Helmis* having no raised lines on pronotum (*H. 4-notata* Say, *H. vittata* Melsh., etc.), by the oblique bands. Outline drawings for figure made by author.

Variations in *Helmis pusilla* Lec.

It is not the intention to add to the available literature by describing a great number of subspecies, but in collecting through the Southern States during June and July of 1931 such a good geographical series of *Helmis pusilla* Lec. was taken that it is felt advisable to make note of it. The typical form of *pusilla* taken in the Northern States and through the Alleghenies has four yellowish spots, two on each elytron, one on the humerus and the other near the apex (B). East of the Alleghenies a form is found in which the spots practically coalesce into a continuous

band, but as one goes toward the Gulf the spots disappear, the apical ones first, until a form is taken in Alabama and Mississippi in which no maculation at all is seen. By removing an elytron one can see, even in a few of the solid black forms, a faint maculation, although no trace is shown externally. Genitalia and external appearance show that they are forms of the same species. In a few localities two subspecies have been taken in the same stream. Suggested names for three subspecies follow:

Helmis pusilla apta, n. subsp.

Size and general appearance as in typical *pusilla* with the exception of the maculation of elytra. The two spots normally found on each elytron, in this subspecies, are joined by a narrow band giving the appearance of a constricted stripe (C). Some paratypes have no constriction, thus showing an indefinitely outlined band from umbone almost to apex.

Types.—Holotype (female) collected in Dunlap Creek west of Clifton Forge, Virginia, July 13, 1931, in U. S. National Museum, as are also two paratypes. Other paratypes in collection of University of Florida, Gainsville, Florida, and in that of the author, taken in Flat Creek, south of Lynchburg, Virginia, Shenandoah River, east of Berryville, Virginia, Holmes Creek at Bonifay, Florida, and Hog Town Creek at Gainsville, Florida.

Helmis pusilla perdita, n. subsp.

Size and general appearance as in typical *pusilla* with the exception of the maculation of the elytra. One of the two spots normally found on each elytron has been lost leaving only that on the umbone (D). Holotype (female) taken July 1, 1931 at Leesburg, Florida. Holotype and several paratypes were collected from submerged roots of the water hyacinth. The plants completely filled the mouth of a small stream entering Lake Harris. Other paratypes were taken in Hog Town Creek, Gainsville, Florida, in company with *H. pusilla apta.*

Types.—Holotype and two paratypes in U. S. National Museum, two paratypes in collection of University of Florida and other paratypes in collection of author.

Helmis pusilla lödingi, n. subsp.

Size and general appearance as in typical *pusilla* except that there are no yellowish spots, thus leaving the elytra solid black. Holotype taken in Monger Creek near Lucedale, Mississippi, June 24, 1931. Paratypes collected by the author from several small streams in southern Mississippi (a few by the kindness of Henry Dietrich) and from creek just outside Mobile, Alabama. It is a great pleasure and privilege to name the subspecies for Dr. H. P. Löding, of Mobile, who has pioneered in the coleopterology of Alabama.

Types.—Holotype and two paratypes in U. S. National Museum, other paratypes in collections of Dr. Löding, Mr. Dietrich and the author.

Stenelmis blatchleyi, nom. n.

Stenelmis sulcata Blatchley 1910, "The Coleoptera of Indiana," page 681. Grouvelle having described *Stenelmis sulcata* from Sumatra in 1892 (Not. Leyd. Mus. XIV, 1892, p. 188) the name becomes a homonym and *blatchleyi* is offered for the species described from Lake Maxinkuckee, Marshall County, Indiana.

Explanation of Figure 2.

A—outline drawing of *Helmis dietrichi* Musgrave. *Aa*—dorsal view of aedeagus of *H. dietrichi*. *Ab*—lateral view showing decurved form of median lobe in aedeagus of *H. dietrichi*. *B*—normal maculation of *H. pusilla* Lec. *C*—maculation of *H. pusilla apta* Musgrave. *D*—maculation of *H. pusilla perdita* Musgrave.

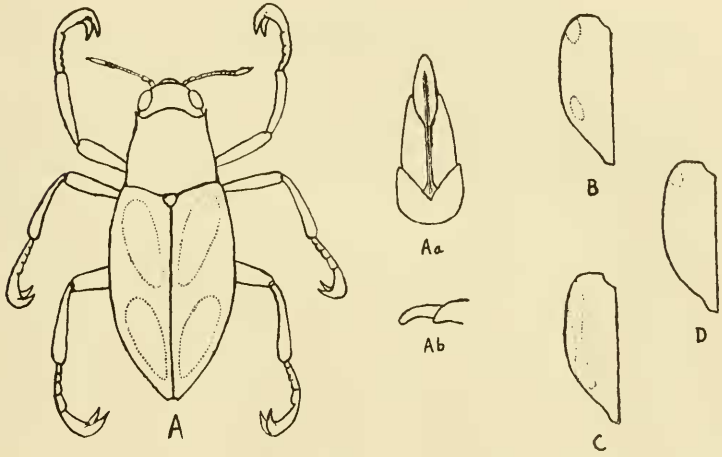

Figure 2.